

South Carolina Department of Natural Resources

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September 13, 2013

Mr. Stephen A. Brumagin
U.S. Army Corps of Engineers
Columbia Regulatory Office
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1835 Assembly Street, Rm. 865 B-1
Columbia, South Carolina 29201

REFERENCE: P/N #SAC-2008-1333-DIS, SC Department of Transportation
Proposed Long Branch Stream Mitigation Site

Dear Mr. Brumagin,

The South Carolina Department of Natural Resources (DNR) has received a proposed Permittee-Responsible Wetland Mitigation (PRM) Plan, dated July 25, 2013 from the South Carolina Department of Transportation (DOT or Applicant) for the proposed Long Branch Stream Mitigation Site. The proposed mitigation site and conceptual plan has been developed and submitted to the U.S. Army Corps of Engineers (USACE) by DOT for consideration of the need to mitigate for unavoidable impacts to streams associated with the construction of the proposed Interstate 73 (I-73). DNR was an active participant in the lengthy Agency Coordination Team (ACT) process that facilitated the National Environmental Policy Act requirements in the planning of I-73. DNR personnel participated more recently in an interagency meeting and field reconnaissance of the proposed PRM site on August 28, 2013. The following comments are submitted pursuant to your July 29, 2013 request that the PRM Plan be reviewed by the agencies.

The proposed stream mitigation site is located northeast of the community of Floydale in Dillon County, approximately 5 miles southeast of the City of Dillon. The site is located in the Little Pee Dee River Watershed, USGS 8-digit Hydrologic Unit Code (HUC) 03040204, and is approximately 7 miles from the proposed I-73 corridor. The site would consist of approximately 94 acres of riparian upland and wetland areas that include approximately 14,607 linear feet of streams.

The PRM plan indicates that the site encompasses most of Long Branch, a perennial tributary to Indian Pot Branch which discharges to the Little Pee Dee River southwest of the site. The site also includes approximately half of the run of Indian Pot Branch. The upper portion of Long Branch has been extensively channelized, is no longer connected to its floodplain, and is surrounded by agricultural fields. The lower portions of Long Branch as well as Indian Pot Branch are much less impacted with relatively intact adjacent wetlands although these areas have been impacted somewhat by ongoing beaver activity and logging. The proposed work would

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involve stream restoration of the upper portions of Long Branch and stream enhancement and buffer preservation of the remainder of Long Branch and Indian Pot Branch.

Indian Pot Branch flows into Lake Norton, a 54-acre impoundment, at Little Pee Dee State Park immediately below the proposed mitigation site. The stream enters the floodplain of the Little Pee Dee River below the Lake Norton dam prior to its confluence with the river. The PRM plan indicates that the proposed project will improve water quality and downstream habitat as well as provide a corridor for terrestrial wildlife movement. DNR submits that the presence of the existing impoundment severely limits the downstream benefits of the proposed mitigation with regard to aquatic habitat and to a lesser degree water quality although it may provide some benefit to downstream terrestrial wildlife species.

The PRM plan proposes vegetative enhancement and buffer preservation along the lower portions of Long Branch and Indian Pot Branch (Sections D, E, F and I). The proposed vegetative enhancement will consist of the removal of Chinese privet (*Ligustrum sinense*) and other invasive, exotic species along with the supplemental planting of ecologically typical, native understory and canopy species. The proposed buffer widths will vary from approximately 50 feet to 590 feet and will average around 150 feet; however, the buffers currently are limited to only one side of the stream along approximately 3,500 linear feet of Indian Pot Branch (Section F) and along approximately 800 linear feet of Long Branch (Section E). The plan indicates that the two property owners along these reaches are not willing to participate in the project. The riparian areas adjacent to these reaches are described as wetlands that will be difficult to develop or impact; however, much of the credit generated by the proposed mitigation is from restoring areas that are stated to have been historically impacted by silvicultural activities. Recent logging impacts were observed adjacent to several of the reaches proposed to be included in the project during the interagency site visit. In addition, the exclusion of these buffer areas will make it more difficult to maintain the proposed removal of privet as well as the control of beaver activity in the adjacent mitigation areas. For these reasons, DNR has significant concerns regarding the lack of buffers along Sections E and F and submits that proposed restoration and enhancement efforts overall will not be viable if there is inadequate protection afforded these stream reaches.

The portion of Long Branch included in the mitigation site has three existing public road crossings, Hayestown Road, Stubbs Drive and Bermuda Road. These road crossings define the downstream boundaries for Sections A, B and C, respectively as indicated in the maps in the PRM Plan (Figures 6 and 7). In addition, there is one existing private farm access road crossing in Section G and a proposed farm access road crossing in Section A. The PRM Plan indicates that the pipes at Hayestown Road and Stubbs Drive will be replaced; however, the culverts/pipes at all three of the public road crossings appear to be severely impacting the stream. Poorly designed stream crossings can reduce habitat values by segmenting and destabilizing streams and adjacent riparian areas. DNR considers habitat fragmentation and segmentation to be one of the primary impacts associated with the proposed construction of I-73 and we submit that the proposed mitigation should not include these same impacts. Therefore, we recommend that all the public road crossings as well as the farm access road crossings on the PRM site be bridged. Currently, the Hayestown Road crossing and the Stubbs Drive crossing segment a section of stream over 270 linear feet. Since Stubbs Drive is a relatively short, unpaved road that connects two paved roads with no residence or business access points an alternative to bridging could be to close the road at the crossing and remove all fill from the stream and adjacent wetlands. In addition, to removing Stubbs Road we recommend that the

proposed restoration of Section B be continued downstream to include Section C to create a reach of restored stream of approximately 1,250 linear feet in length.

There are several thousand linear feet of ditches and ditched streams that flow out of agricultural fields into Sections A and G at the upper end of the project site. There also are several lateral ditches that flow from adjacent agricultural fields into these two sections of the project. In addition, there are two ponds that appear to be old animal waste lagoons adjacent to the stream immediate upstream from Hayestown Road. DNR is concerned that nutrients and other pollutants from these ditches and ponds will continue to impact the streams proposed for restoration as well as downstream areas. There was some discussion during the site visit regarding the placement of water quality treatment swales and other measures within the stream buffer areas that would be controlled by the applicant; however, we question whether or not this will be adequate to protect the water quality in the streams. There also is no baseline water quality information provided in the plan nor is water quality addressed in the proposed monitoring plan. Stream Section H currently is a ditch that is proposed for stream restoration, but there is no information provided that supports that this ditch was historically a stream. If this information can be provided for Section H, we recommend that the entire ditched reach be restored and not just the lower half as proposed.

The proposed mitigation site is located in the Southeastern Plains eco-region, however the PRM plan states that 51.63% of the proposed impacts are located in the Mid-Atlantic Coastal Plain eco-region. The 2010 Mitigation Guidelines (SOP) for the Charleston District state that mitigation sites should be located within the same Level III eco-region, the same major drainage basin, and the same 8-digit hydrologic unit (HUC) as the impacts. The SOP allows some latitude for impacts that are in adjacent HUCs within the same major drainage basin with reduced credit for the location factor but it states that projects that are out of eco-region must be considered on a case-by-case basis with no credit for the location factor if they are approved. The applicant has provided a justification in the PRM plan for using the adjacent HUC (0.05) factor for these out of eco-region credits, however DNR submits that these credits should receive the case-by-case location factor of 0.0 if they are approved. The Applicant should submit for approval a detailed justification for providing stream mitigation that is out of eco-region for the impacts that are located in the Mid-Atlantic Coastal Plain.

The proposed PRM plan is part of an overall mitigation package that includes the proposed Long Branch site, the previously proposed Joiner Bay wetland site in Horry County, and the use of one or more mitigation banks expected to be approved in the near future. The use of the mitigation bank is to replace 1,500 credits at Sandy Island that subsequently have been used for the Carolina Bays Parkway and are no longer available for I-73. It has long been acknowledged and should not be in contention that the proposed I-73 is anything but a routine project; it will bisect a significant portion of rural landscape, cross and impact many wetlands and streams creating landscape scale effects to regional aquatic resources. DNR is concerned that the use of a large number of credits from one or more mitigation banks could substantially reduce mitigation credit availability in the Pee Dee or adjacent watersheds. These banks have been or will be approved to ensure that mitigation credits are available for more routine projects not having the large impacts of a project such as the proposed I-73. The I-73 ACT has previously expressed concern about this issue as stated in the PRM plan on page 2:

...the general consensus of the ACT was that if an approved mitigation bank were available, a project the size of I-73 could result in the purchase of all available credits and could close the bank to use by other projects in the area. All agreed

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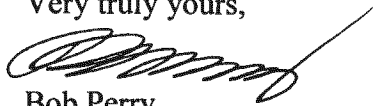
that for a project of this magnitude, permittee-responsible mitigation would be appropriate.

DNR continues to support this ACT statement and recommends that all mitigation required for I-73 be obtained through a PRM plan that addresses the scale and scope of proposed impacts.

In summary, the proposed PRM site is located upstream of an existing impoundment, does not have adequate buffers, is segmented by road crossings, impacted by agricultural ditches and is not in the same eco-region as more than half the proposed I-73 project impacts. As submitted the PRM Plan would result in the limited restoration of highly impacted farmland that can only be characterized as ordinary in the natural resources context. We provide these constructive comments in good faith toward the objective of achieving an acceptable mitigation plan for the proposed roadway project, however we submit that even if all our recommendations are incorporated into the PRM Plan it will not meet the previously stated goals recommended by the ACT including the use of landscape scale mitigation approach and the provision of direct public benefits through public ownership and public use of the mitigation property. DNR continues to urge the consideration of a comprehensive, landscape scale mitigation plan that will result in the restoration, enhancement and protection of resources that are deemed to be outstanding and worthy based on rigorous scientific and technical merit.

DNR staff remain available, and are willing to consult with the Applicant to work toward the completion of the above stated objectives. Please do not hesitate to contact me if I can assist with the development of the ACT recommended goals. If you have any technical questions please contact Greg Mixon at mixon@dnr.sc.gov or 803.734.3282.

Very truly yours,



Bob Perry
Director, Office of Environmental Programs

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